

# Key Performance Indicators in the Context of Sustainable Business Development

Peter Sekáč

University of Economics in Bratislava, Faculty of Business Management,  
Dolnozemska cesta 1, Bratislava 5, 852 35  
Slovak republic  
peter.sekac@euba.sk

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**Abstract.** KPI stands for key performance indicator. The name suggests, a corporate KPI is nothing more than an indicator that measures the performance of a particular business activity or area. There can be instantly find out from car's speedometer and other indicators on the dashboard. Well-chosen KPI combination will allow to run business effectively, not only provide information on how business is doing, but will be able to identify emerging issues in time, take corrective action and see at least a little bit into the future. With KPI, there can be tracked not only a company's financial results, but also performance in all other important areas, such as sales, marketing, manufacturing, customers, suppliers or employees. KPIs also differ depending on the different sectors and the nature of the activity (production / trade / services / logistics ...). Performance indicators can take various forms: absolute number (eg sales achieved in €), relative data (% sales growth), ratio (number of pieces produced per day), ranking or rating (customer satisfaction). From a global perspective, it is the goal of all initiatives addressing the issue sustainable development to correctly define the essence of sustainability, to formulate principles and measures to improve and maintain economic, social conditions from an environmental point of view, to set acceptable targets, to contribute with active interventions to fulfill them, but also to choose the right indicators, indices or other permanent measures sustainability

**Keywords:** KPI, Sustainable development, Goal

**JEL classification:** M12, M14, Q56

## 1. Introduction

The global digital world as of today includes smart sustainable development, value creation and wealth are among the most important goals of society. Industry performance includes inclusion the objectives of smart sustainable development, in particular social and territorial cohesion, economic efficiency, innovation, digital and environmental performance into the company's operating procedures. Companies that

compete globally, must commit to the overall intelligent implementation of operational initiatives and deliver reports on them. The current framework of indicators available to measure the overall sustainability of business, do not effectively address all aspects of sustainability at the operational level.

The meaning of "sustainable development" should be kept simple: sustainability is a state that can prevail in the long run, in fact forever. Sustainable development is a process that brings sustainability closer (someone considers sustainability and sustainable development to be the same). Sustainability usually refers to a system that involves not only society and people, but also nature or the environment. The system can be a city or a country, but today it is the most common world with everything that concerns it, including nature, people and our society. It is often mentioned that sustainable development has three dimensions: environmental, economic and social. These three parts of the system can be divided into smaller parts. The environment consists of life forms, atmosphere, soil, etc., while the social dimension can be divided into human well-being and society with all its institutions. Thus, it is clear that this huge system has many components.

## **2. Methodology**

The issue of indicators of sustainable development, whether at the micro or macro level, is relevant not only from a practical point of view, but also from a theoretical point of view. The aim of the contribution was to provide a theoretical overview of approaches to measuring sustainability at the macro and micro level, i.e. at the global level of countries and within the business environment.

In the article, by collecting and studying valuable information from domestic and foreign literature, articles and internet sources is a basic prerequisite for gathering important facts about the issue being addressed. The acquired knowledge on the topic in question is the fundamental basis for processing the paper, which is dedicated to and describes the issue of Key performance indicators in the context of sustainable business development, its importance, inclusion within the complete controlling system.

Foreign and domestic publications, whether articles, books, or internet resources, which discuss the issue in question, are mainly used to prepare the contribution. The observations and knowledge of individual authors and the expression of their opinion within the given thematic area are captured here. Here were taken into account the positions of the authors of the published works and formed our own opinion on the topic under investigation.

## **3. Key Performance indicators**

According to Wagner (2009), a company's performance can be characterized as its ability to enhance the resources invested by its activities, produce profit, increase the company's value and at the same time it is the ability to secure future development. Lesáková (2007), on the other hand, understands the company's performance - the company's ability to achieve the desired effects or outputs, if possible, in measurable

units. For this reason, it is necessary to know the individual KPIs of the company and to be able to measure them.

Key Performance Indicators (KPIs) are important navigational tools that managers use to understand whether their business is on a successful path or whether it is deviating from a prosperous path. The right set of indicators identifies performance and highlights areas that require attention. "What is measured is done" and "if you can't measure it, you can't control it" are just two popular proverbs used to emphasize the critical importance of metrics. Without the right KPIs, managers swim blindly. (Marr, 2012)

Performance measurement is a fundamental principle for managing an organization. Measuring performance is important because it identifies current gaps between actual performance and the required plan and provides an indication of progress toward closing the gaps. A carefully selected performance indicator can accurately identify where steps need to be taken to improve performance. The challenge for today's companies is how to align performance measures with business strategy, corporate culture, the balance between merit and cost of implementing measures, and ways to implement these measures (Weber, 2005).

KPIs are indicators that measure a company's performance in a given process, strategy or specific action. Continuous evaluation of KPIs is key for the company to achieve the desired results, as well as to understand where it is and how to improve. (Syndle, 2021). ISO 9004: 2009 defines KPIs as factors that are managed by an organization and that are critical to its sustainable success. They should therefore be subject to performance measurement and should be identified.

KPIs can be assigned to a process, service, organizational unit, resp. the whole organization and in the latter case show how effectively the company achieves key strategic, respectively, business goals. KPIs express the required performance, which can be quality, efficiency or economy. They are used by both individuals and organizations at all levels of management. KPIs at the TOP level mainly focus on the overall performance of the company, while at the middle and lower levels they are focused on processes within departments.

KPIs should be quantifiable and should enable the organization to set measurable targets, identify, monitor and anticipate trends and, where necessary, provide corrective, preventive and improvement measures (Namešanská - Pačaiová, 2012). KPIs should be progressively developed as performance indicators for relevant functions and levels of the organization to support the achievement of top-level objectives. At the same time, top management should choose KPIs as the basis for strategic and tactical decisions (feedback). According to Nenadál (2005), KPIs should correspond to the nature and size of the organization and its products, processes and activities. It is the task of top management to create, implement and properly set up the structure of KPIs in the organization. They need to be consistent with the organization's goals, which should further be consistent with its strategy and policy. Specific information related to risks and opportunities should be taken into account when selecting KPIs. When selecting KPIs, the organization should ensure that they provide information that is measurable, accurate and reliable and useful in implementing corrective action when performance is not in line with objectives. In addition, they

should provide information that can be used to improve the operation and efficiency of processes.

Parmenter (2014) states that only a small number of companies evaluate KPIs correctly. One of the reasons for incorrect evaluation may be the very nature of the indicators, which managers and other responsible persons in the company do not know. To properly understand what KPIs are, the author lists their 7 basic features:

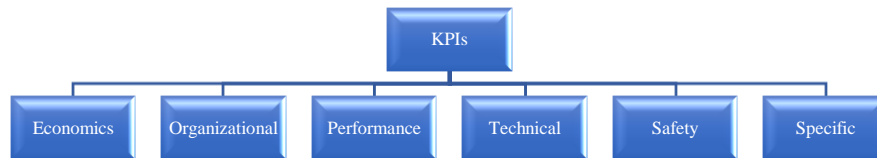
- a. non-financial indicators (not expressed in dollars, yen, euros, crowns, etc.),
- b. repeatedly measured (eg daily or 24/7),
- c. they are dealt with by the CEO and top management,
- d. understanding of indicators and remedial measures by all employees,
- e. responsibility is linked to the individual or team (it does not follow the result influenced by several activities, managed by several managers, this is dealt with by other indicators),
- f. significant impact (eg affects most major critical success factors and more than one Balanced Scorecard perspective),
- g. positive impact (eg positively affects all other performance indicators).

The choice of KPIs is conditioned by the area of operation of the company. However, a general structure and a minimum list of indicators for each area have not yet been defined. From our point of view, we would add the perspective of corporate social responsibility to the basic KPIs that the company reports. Examples include the carbon footprint tracking indicator, the water footprint, energy consumption, supply chain miles, waste reduction rates, waste recycling rates and more.

The authors Namešanská - Pačaiová (2012) divide KPIs into 6 basic groups (see picture no. 4):

- a. Economic: indicators that take into account the economic effect / consequence include, for example, unit production costs, total personnel costs, warehouse value, total maintenance costs, organizational profit.
- b. Organizational: indicators based on activity management include e.g. average training costs per employee, employee productivity, number of complaints.
- c. Performance / customer: indicators that point to the processes / activities themselves. KPIs in the field of quality, customer-oriented and continuous improvement are also included here, specifically e.g. customer satisfaction,% of failures, total productivity, net production time,% of plan fulfillment.
- d. Technical: so-called Reliable KPIs, such as KPIs in maintenance and the like, include downtime, MTTR, OEE,% corrective interventions.
- e. Safety / environmental: indicators that take into account the health and safety effect are also included here. Specifically, it is e.g. o Injury index, electricity consumption, water consumption, etc. (
- f. Specific: indicators that are specific to a given company and that the company in question decides to include in its structure.

Picture 1: Division of KPIs into areas of management in the company



Source: Namešanská - Pačaiová, 2012, own processing

We are in favor of the above breakdown of individual KPIs, but we would pull the marketing and sales perspective into a separate category. We would propose to modify the Technical Indicators group as new, namely Operational Processes and Supply Chain. Within this category, we will be able to further discuss the issue with the relevant indicators

#### **4. Quantification of possibilities of sustainable development of companies**

At the microeconomic level, the sustainable growth of companies is often measured in quantitative terms using data from accounting - financial statements or the ability of companies to accumulate resources (Babalola 2013). Financial performance measured by profit and profitability levels is clearly related to sustainable growth (Demirgunes, Ucler 2015). Companies that rely on their own financial resources are growing slower because it is more difficult for them to invest. The use of indebtedness and the increase in additional financing costs lead to sustainable growth of companies. On the other hand, the introduction of an adequate value added control system leads to a more efficient use of resources, to an increase in investment capacity, and thus to a better situation for companies with sustainable growth (Abraham, Harris, Auerbach 2017). Despite the complexity arising from the many interpretations of sustainability issues and the multifaceted nature of sustainability, a corporate sustainability assessment should be carried out to ensure environmental efficiency, fair trade practices and environmental justice (Marshall, Toffel 2005).

The economic outlook is often expressed through costs (Metta, Badurdeen 2013), revenues (Choudhary et al. 2015), profit sharing (Chaabane et al. 2012) or economic value (Pimentel, Gonzalez, Barbosa 2016). Such an approach, however, does not take into account the concept of sustainability in the true sense of the word. Sustainable business performance is a multidimensional concept based on the idea of sustainable development, which replaces the traditional understanding of company performance

only as a capital appreciation for the owners (shareholders). Nevertheless, according to Kocman et al. (2011), indicators of a company's economic performance continue to be a major concern for owners and investors. However, together with information on environmental and social factors, they provide a comprehensive picture of the state of corporate sustainability. Businesses should therefore seek to achieve long-term benefits by implementing sustainability activities at the very core of corporate strategy (Chabowski, Mena, Gonzalez-Padron 2011). In this regard, it is essential that they set measurable and relevant sustainable development goals and select appropriate metrics to measure them (Dočekalová 2012).

Valid analysis and assessment of the company's sustainability are based on an adequate and reliable information spectrum, while emphasis should also be placed on the selection criteria for the assessment of sustainability. In this context, it must be decided whether the assessment of sustainability should be based solely on financial reporting data that reflects its financial situation or whether other parameters should be used. For this reason, the need for an integrated reporting model for evaluation has been emphasized in recent years. 7 (2), pp. 12-25 20 <http://www.mladaveda.sk> sustainability. Such an approach means taking into account not only financial criteria, but also criteria that reflect both the internal and external environment (Bogićević, Domanović, Krstić 2016). In addition, according to Fraser, Ormiston (2013), some of the key information needed to evaluate the company's performance in the financial statements is not available, some are difficult to find and many cannot be measured, and in recent years attention has been focused on the need to use non-financial criteria for evaluating the company's performance.

As stated by Kocmanová, Dočekalová (2011), sustainability is a strategy of the process of sustainable development. It is important for companies to know what indicators can be used to measure results in individual areas. The economic side of sustainability certainly plays an important role in this system. The basic desire of investors and business owners is to increase economic performance and determine whether the company is able to increase its value, and thus provide them with a reasonable return on investment. For this reason, the company's basic goal is to maximize market value in the long run. Currently, the literature offers a number of methods for measuring this value. In recent years, the Economic Value Added Indicator (EVA) has been increasingly used. As stated by the authors Kisel'áková, Šoltés (2016), indicators such as profit, turnover, added value, costs, etc. are very often applied to measure corporate sustainability. Due to the wide range of sustainability measurement tools, however, not all of them can be applied and it is important for companies to select only key indicators that can demonstrate progress towards sustainability.

In 2018, the international company ING Wholesale Banking interviewed 210 financial managers in large and medium-sized companies based in the USA regarding the importance of sustainability for business strategies. They found that more than 80% of companies incorporate sustainable thinking into their business growth plans, and nearly half of managers said that sustainability concerns influenced their growth strategies. Firms with the strongest sustainability strategy usually perform better in terms of revenue, loans and credits. Almost all the companies contacted confirmed that their financial results play an important role in the process of building sustainability

initiatives. In addition, its report (Sustainability and Finance Study 2018) sets out the factors that lead companies to take sustainability measures:

- a. sales growth (39%),
- b. cost reduction / savings and efficiency (35%),
- c. brand reputation (30%),
- d. keep up with the competition (29%),
- e. regulatory requirements (23%),
- f. cheaper financing (16%),
- g. tax benefits (16%),
- h. attracting new employees (13%).

As part of the analysis, ING Wholesale Banking also focused on the financial side of companies in order to find out what goals the companies have set for the next 2 years in the field of sustainable financial development (Sustainability and Finance Study 2018):

- a. improve the ability to model future revenues from sustainability initiatives (60%),
- b. develop appropriate metrics for measuring sustainable activities (49%),
- c. gain knowledge of environmental financing instruments (47%),
- d. adjust traditional asset valuation approaches (41%).

## **5. Current challenges, barriers and possible solutions in the field of sustainable business development**

According to Schaltegger, Lüdeke-Freund, Hansen (2012), despite the many different business models of sustainability, they all have a common goal - to create value by integrating economic, environmental and social aspects, and not just to prioritize profit. However, the integration of these aspects is difficult because they may conflict with management objectives, as focusing on profitability objectives often overlaps with the pursuit of sustainability in business (Van Bommel 2018).

According to the University of Cambridge Institute for Sustainable Leadership (2018), the most important challenges for sustainable business include:

- a. ensuring a link between shareholder value and sustainable business,
- b. harmonizing the concepts of business growth and sustainability,
- c. transforming business models in the context of sustainability,
- d. bridging the gap between objectives and action on a practical level,
- e. implementation of goals at all levels in the company,
- f. maintaining the sustainability momentum.

According to the Sustainability and Finance Study report (2018), the main barriers that eliminate companies' investments in sustainability initiatives include:

- a. identification of business opportunities in the field of sustainability (52%),
- b. prediction of corporate performance (50%),

- c. problems in measuring performance and quantifying benefits (50%),
- d. government regulations (40%),
- e. access to finance (30%),
- f. insufficient commitment to sustainability from the board of directors (29%),
- g. lack of expertise (24%),
- h. Incomplete company-wide sustainability framework (19%).

In this regard, the University of Cambridge Institute for Sustainable Leadership (2018) also defines the most promising solutions in the field of business sustainability:

- a. Resolve the false dichotomy between profit and business intent (companies that are successful and profitable in the long run generate benefits for society and stakeholders).
- b. Be honest and authentic (you need to understand the meaning and values of the business and actively fight for sustainability issues).
- c. Create space for meaningful discussions at the level of the board of directors and management (basic changes in the strategy cannot be implemented overnight) and this requires raising awareness of solutions on this topic).
- d. Innovate and identify new forms of value creation (it is essential to support innovation and create business processes and processes that align sustainability with business performance).
- e. Report the impact of the sustainability concept, not only on financial performance (develop meaningful impact indicators).

The Sustainability and Finance Study (2018) states that several steps need to be taken by companies on the path to sustainability:

- a. Companies must strive to increase sustainability by complying with stricter laws and regulations.
- b. Businesses need to realize that sustainability actions can improve business performance, which results in increased efficiency and lower costs.
- c. Businesses need to become more interested in their customers and suppliers and see how they can help them meet their sustainability goals.
- d. Businesses must adopt the concept of sustainability as the basic framework in the strategy that meets the needs of sustainable growth.

## **6. Conclusion**

In connection with efforts to meaningfully apply the concept of sustainability in everyday practice, great efforts are made to design and implement various indicators to monitor, measure and subsequently assess whether the development of the selected entity (enterprise, industry, region, state, etc.) in accordance with the principles and criteria of sustainable development or not.

The issue of sustainable development indicators, whether at the micro or macro level, is relevant not only from a practical point of view, but also from a theoretical



point of view. The aim of the paper was to provide a theoretical overview of approaches to measuring sustainability at the macro and micro levels, ie at the global level of countries and within the business environment. Based on a search of professional literature and scientific studies, we have come to the conclusion that there is currently no uniform measure, index or approach quantifying the level of sustainable development. However, the opinions of experts are not so different, however, we must point out the significant ambiguity of the analyzed approaches. In the following articles, the research direction will focus on the practical application of the processed theoretical starting points in order to evaluate the degree of sustainable development of Slovakia and EU countries within the selected global indicators reflecting the basic pillars of sustainability.

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